Statement of Basis of the Federal Operating Permit

INEOS USA LLC

Site Name: Chocolate Bayou Plant Area Name: Polypropylene Units Physical Location: 2 miles south of FM 2917 on FM 2004 Nearest City: Alvin County: Brazoria

> Permit Number: O1353 Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 325199
NAICS Name: All Other Basic Organic Chemical Manufacturing

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;

A basis for applying permit shields;

A list of the federal regulatory applicability determinations;

A table listing the determination of applicable requirements;

A list of the New Source Review Requirements;

The rationale for periodic monitoring methods selected;

The rationale for compliance assurance methods selected;

A compliance status; and

A list of available unit attribute forms.

Prepared on: July 11, 2019

Operating Permit Basis of Determination

Permit Area Process Description

The Chocolate Bayou Plant operates 3 polypropylene units. Polypropylene feed to the units comes from several sources and may be treated in the feed purification facilities. Trace contaminants and non-condensable impurities are removed in a series of treaters, reactors and a stripper. The purified propylene is stored in propylene bullets in the No. 2 Polypropylene Unit for feed to No. 2, No. 3 and No. 4 Polypropylene units as needed. Polypropylene monomer (and in some cases a co-monomer) is fed to the reactor along with catalyst, promoter and modifiers. The monomers react to form polypropylene powder. The resulting powder contains some entrained propylene gas. The powder is degassed in an expansion bag filter, which removes the gas and returns it to the process. Further degassing and deactivation of the catalyst takes place in a purge column, which is vented to the unit flare. Polypropylene powder may be shipped out as product. If the polypropylene is to be shipped out as pellets, the powder is processed through a mixer which mixes and melts the polymer so that it can be pelletized. Polypropylene pellets can be blended before loading. Hydrocarbons released through normal vents or by discharges from relief valves during upsets or emergency situations are contained within a closed blowdown system and routed to an elevated flare stack at each unit. A cooling tower provides cooling water to each unit.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O2327, O3966

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, PM, NOx, HAPs, CO

Reading State of Texas' Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - o Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - o Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - o Compliance Requirements
 - Protection of Stratosphere Ozone
 - Permit Location

- Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - Permit Shield
 - New Source Review Authorization References
 - o Compliance Plan
 - Alternative Requirements
- Appendix A
 - Acronym list
- Appendix B
 - Copies of major NSR authorizations

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These

additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Appendix B

Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also

included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No
Federal Implementation Plan for Regional Haze (Texas SO ₂ Trading Program)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

- 1. Office activities such as photocopying, blueprint copying, and photographic processes.
- 2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
- 3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
- 4. Outdoor barbecue pits, campfires, and fireplaces.
- 5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
- 6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
- 7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
- 8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
- 9. Vehicle exhaust from maintenance or repair shops.
- 10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
- 11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
- 12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
- 13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 15. Well cellars.
- 16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
- 17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
- 18. Equipment used exclusively for the melting or application of wax.
- 19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
- 20. Shell core and shell mold manufacturing machines.
- 21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
- 22. Equipment used for inspection of metal products.
- 23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
- 24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.

- 25. Battery recharging areas.
- 26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air all ua forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
P3-EMGEN	30 TAC Chapter 117, Subchapter B	117B-1	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
P3-EMGEN	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
P4-EMGEN	30 TAC Chapter 117, Subchapter B	117B-1	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
P4-EMGEN	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
P2-FLARE	30 TAC Chapter 111, Visible Emissions	111A-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
P2-FLARE	30 TAC Chapter 115, HRVOC Vent Gas	115H-1	Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d). Out of Service = Flare was not permanently out of service by April 1, 2006. Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time. Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time. Alternative Monitoring = No alternative monitoring and test methods are used. Minor Modification = No minor modifications to the monitoring and test methods are used. Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC. Flare Type = Flare is in multi-purpose service.

Unit ID	Regulation	Index Number	Basis of Determination*
P2-FLARE	40 CFR Part 60, Subpart A	60A-1	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
P3-POLY	30 TAC Chapter 111, Visible Emissions	111A-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
P3-POLY	30 TAC Chapter 115, HRVOC Vent Gas	115H-1	Out of Service = Flare was not permanently out of service by April 1, 2006. Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time. Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time. Alternative Monitoring = No alternative monitoring and test methods are used. Minor Modification = No minor modifications to the monitoring and test methods are used. Flare Type = Flare is specifically designed to receive and control liquid or dual phase streams containing HRVOC.
P3-POLY	40 CFR Part 60, Subpart A	60A-1	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
P4-FLARE	30 TAC Chapter 111, Visible Emissions	111A-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
P4-FLARE	30 TAC Chapter 115, HRVOC Vent Gas	115H-1	Out of Service = Flare was not permanently out of service by April 1, 2006. Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time. Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time. Alternative Monitoring = No alternative monitoring and test methods are used. Minor Modification = No minor modifications to the monitoring and test methods are used. Flare Type = Flare is specifically designed to receive and control liquid or dual phase streams containing HRVOC.
P4-FLARE	40 CFR Part 60, Subpart A	60A-1	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted

Unit ID	Regulation	Index Number	Basis of Determination*
			Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
P3- VALVEFUG	30 TAC Chapter 115, HRVOC Fugitive Emissions	115H-1	Agitators = The fugitive unit contains agitators. Alternative Work Practice in § 115.358 = No components are complying with the alternative work practice requirements in 30 TAC § 115.358. Compressor Seals = The fugitive unit contains compressor seals. Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines. Process Drains = The fugitive unit contains process drains. Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC. Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves. ACR = No open-ended valves or lines are complying with an alternate control requirement. Less Than 250 Components at Site = The fugitive unit is located at a site with at least 250 fugitive components in VOC service. Weight Percent HRVOC = Components in the fugitive unit contact process fluids that contain less than 5.0% HRVOC by weight and process fluids that contain HRVOC at 5.0%, or greater, by weight on an annual average basis. Complying with § 115.781(b)(9) = Process drains are complying with the requirements of § 115.781(b)(9). Pumps with Shaft Seal System = Pumps are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Bypass Line Valves = The fugitive unit does not contain bypass line valves. Compressors with Shaft Seal System = Compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Planges or Other Connectors = The fugitive unit contains flanges or other connectors. Heat Exchanger Heads, etc. = The fugitive unit contains pressure relief valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Pump Seals = The fugitive unit contains pump seals. ACR = No bypass line valves are complying with an alternate control requirement. Agitators with Shaft Seal System = No agitators are equipped with a shaft sealing system that
P3- VALVEFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115D-1	Compressor Seals = The fugitive unit contains compressor seals. Flanges = The fugitive unit contains flanges. Open-ended Valves = The fugitive unit contains open-ended valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit has process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.

Unit ID	Regulation	Index Number	Basis of Determination*
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for process drains or no alternate has been requested.
			Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.
			Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.
			Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.
			Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight.
			Complying with 30 TAC § 115.352(1) = Process drains are complying with the requirements in 30 TAC § 115.352(1).
			Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.
			TVP 0.002 PSIA or Less = The fugitive unit has components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Pump seals contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.
			Complying with § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).
P3- VALVEFUG	40 CFR Part 60, Subpart DDD	60DDD-1	FLANGES AND OTHER CONNECTORS (ANY SERVICE) [NSPS DDD] = FLANGES OR CONNECTORS IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			FLARE = USING A FLARE FOR CONTROL
			MANUFACTURED PRODUCT [NSPS DDD] = POLYPROPYLENE OR POLYETHYLENE
			OPEN-ENDED VALVES OR LINES (ANY SERVICE) [NSPS DDD] = OPEN-ENDED VALVES OR LINES IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE [NSPS DDD] = PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			PUMPS IN LIGHT LIQUID SERVICE [NSPS DDD] = PUMPS IN LIGHT LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE [NSPS DDD] = VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			VAPOR RECOVERY SYSTEM = NOT USING A VAPOR RECOVERY SYSTEM FOR CONTROL
			CONTINUOUS PROCESS [NSPS DDD] = THE AFFECTED FACILITY IS A CONTINUOUS PROCESS
			EEL = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)FLANGES AND OTHER CONNECTORS [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).

Unit ID	Regulation	Index Number	Basis of Determination*
			EQUIVALENT EMISSION LIMITATION (EEL)OPEN-ENDED VALVES OR LINES [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)PUMPS LIGHT LIQUID SERVICE [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			40 CFR 60 (NSPS) SUBPART DDD CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = AFTER JANUARY 10, 1989
			EQUIVALENT EMISSION LIMITATION (EEL)VALVES GAS/VAPOR, LIGHT LIQUID SVC [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			COMPLYING WITH § 60.482-2 = YES
			COMPLYING WITH § 60.482-6 = YES
			COMPLYING WITH § 60.482-8 = YES
			COMPLYING WITH §60.482-10 = YES
			40 CFR 60 (NSPS) SUBPART DDD DESIGN CAPACITY = FACILITY HAS DESIGN CAPACITY TO PRODUCE GREATER THAN OR EQUAL TO 1,000 MEGAGRAMS PER YEAR
			CLOSED VENT SYSTEMS AND CONTROL DEVICES (ANY SERVICE) [NSPS DDD] = CLOSED VENT SYSTEM AND CONTROL DEVICES IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			COMPLYING WITH § 60.482-7 = YES
			COMPLYING WITH § 60.482-8 = YES
			COMPRESSORS (ANY SERVICE) [NSPS DDD] = COMPRESSORS IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			PUMPS IN HEAVY LIQUID SERVICE [NSPS DDD] = PUMPS IN HEAVY LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			ENCLOSED COMBUSTION DEV. = NOT USING AN ENCLOSED COMBUSTION DEVICE FOR CONTROL
			EQUIPMENT IN VACUUM SERVICE = NO
			EQUIVALENT EMISSION LIMITATION (EEL)-[NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)COMPRESSORS [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)PUMPS HEAVY LIQUID SERVICE [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			SAMPLING CONNECTION SYSTEMS (ANY SERVICE) [NSPS DDD] = SAMPLING CONNECTION SYSTEMS IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			VALVES IN HEAVY LIQUID SERVICE [NSPS DDD] = VALVES IN HEAVY LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			EQUIVALENT EMISSION LIMITATION (EEL)SAMPLING CONNECTION SYSTEMS [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)VALVES HEAVY LIQUID SERVICE [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			COMPLYING WITH § 60.482-3 = YES
			COMPLYING WITH § 60.482-8 = YES
			COMPLYING WITH §60.482-10 = YES
			COMPLYING WITH § 60.482-5 = YES

Unit ID	Regulation	Index Number	Basis of Determination*
			COMPLYING WITH § 60.482-8 = YES
P3- VALVEFUG	40 CFR Part 60, Subpart VV	60VV-1	Produces Chemicals = The fugitive unit is not part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.
P3- VALVEFUG	40 CFR Part 61, Subpart J	61J-1	40 CFR 61 (NESHAP) SUBPART J DESIGN CAPACITY = SITE IS DESIGNED TO PRODUCE OR USE MORE THAN 1,000 MEGAGRAMS OF BENZENE PER YEAR
			ANY COMPONENT IN BENZENE SERVICE [NESHAP J] = THE FACILITY CONTAINS NO COMPONENT(S) IN BENZENE SERVICE
P4-	30 TAC Chapter	115H-1	Agitators = The fugitive unit contains agitators.
VALVEFUG	115, HRVOC Fugitive Emissions		Alternative Work Practice in § 115.358 = No components are complying with the alternative work practice requirements in 30 TAC § 115.358.
	T agitive Emissions		Compressor Seals = The fugitive unit contains compressor seals.
			Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.
			Process Drains = The fugitive unit contains process drains.
			Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC.
			Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves.
			ACR = No open-ended valves or lines are complying with an alternate control requirement.
			Less Than 250 Components at Site = The fugitive unit is located at a site with at least 250 fugitive components in VOC service.
			Weight Percent HRVOC = Components in the fugitive unit contact process fluids that contain less than 5.0% HRVOC by weight and process fluids that contain HRVOC at 5.0%, or greater, by weight on an annual average basis.
			Complying with § 115.781(b)(9) = Process drains are complying with the requirements of § 115.781(b)(9).
			Pumps with Shaft Seal System = No pumps are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.
			Bypass Line Valves = The fugitive unit does not contain bypass line valves.
			Compressors with Shaft Seal System = No compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.
			Flanges or Other Connectors = The fugitive unit contains flanges or other connectors.
			Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators.
			Pressure Relief Valves = The fugitive unit contains pressure relief valves.
			Pump Seals = The fugitive unit contains pump seals.
			ACR = No bypass line valves are complying with an alternate control requirement.
			Agitators with Shaft Seal System = No agitators are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.
			Complying with § 115.781(b)(9) = Pressure relief valves are complying with the requirements of § 115.781(b)(9).
P4-	30 TAC Chapter	115D-1	Compressor Seals = The fugitive unit contains compressor seals.
VALVEFUG	115, Pet. Refinery		Flanges = The fugitive unit contains flanges.
	& Petrochemicals		Open-ended Valves = The fugitive unit contains open-ended valves.
			Pressure Relief Valves = The fugitive unit contains pressure relief valves.

Unit ID	Regulation	Index Number	Basis of Determination*
			Process Drains = The fugitive unit has process drains.
			Pump Seals = The fugitive unit contains pump seals.
			Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.
			Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.
			Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for process drains or no alternate has been requested.
			Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.
			Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.
			Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.
			Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight.
			Complying with 30 TAC § 115.352(1) = Process drains are complying with the requirements in 30 TAC § 115.352(1).
			Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.
			TVP 0.002 PSIA or Less = The fugitive unit has components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Pump seals contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.
			Complying with § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).
P4- VALVEFUG	40 CFR Part 60, Subpart DDD	60DDD-1	FLANGES AND OTHER CONNECTORS (ANY SERVICE) [NSPS DDD] = FLANGES OR CONNECTORS IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			FLARE = USING A FLARE FOR CONTROL
			MANUFACTURED PRODUCT [NSPS DDD] = POLYPROPYLENE OR POLYETHYLENE
			OPEN-ENDED VALVES OR LINES (ANY SERVICE) [NSPS DDD] = OPEN-ENDED VALVES OR LINES IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE [NSPS DDD] = PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			PUMPS IN LIGHT LIQUID SERVICE [NSPS DDD] = PUMPS IN LIGHT LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.

Unit ID	Regulation	Index Number	Basis of Determination*
			VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE [NSPS DDD] = VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			VAPOR RECOVERY SYSTEM = NOT USING A VAPOR RECOVERY SYSTEM FOR CONTROL
			CONTINUOUS PROCESS [NSPS DDD] = THE AFFECTED FACILITY IS A CONTINUOUS PROCESS
			EEL = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)FLANGES AND OTHER CONNECTORS [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)OPEN-ENDED VALVES OR LINES [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)PUMPS LIGHT LIQUID SERVICE [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			40 CFR 60 (NSPS) SUBPART DDD CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = AFTER JANUARY 10, 1989
			EQUIVALENT EMISSION LIMITATION (EEL)VALVES GAS/VAPOR, LIGHT LIQUID SVC [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			COMPLYING WITH § 60.482-2 = YES
			COMPLYING WITH § 60.482-6 = YES
			COMPLYING WITH § 60.482-8 = YES
			COMPLYING WITH §60.482-10 = YES
			40 CFR 60 (NSPS) SUBPART DDD DESIGN CAPACITY = FACILITY HAS DESIGN CAPACITY TO PRODUCE GREATER THAN OR EQUAL TO 1,000 MEGAGRAMS PER YEAR
			CLOSED VENT SYSTEMS AND CONTROL DEVICES (ANY SERVICE) [NSPS DDD] = CLOSED VENT SYSTEM AND CONTROL DEVICES IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			COMPLYING WITH § 60.482-7 = YES
			COMPLYING WITH § 60.482-8 = YES
			COMPRESSORS (ANY SERVICE) [NSPS DDD] = COMPRESSORS IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			PUMPS IN HEAVY LIQUID SERVICE [NSPS DDD] = PUMPS IN HEAVY LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			ENCLOSED COMBUSTION DEV. = NOT USING AN ENCLOSED COMBUSTION DEVICE FOR CONTROL
			EQUIPMENT IN VACUUM SERVICE = NO
			EQUIVALENT EMISSION LIMITATION (EEL)-[NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)COMPRESSORS [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			EQUIVALENT EMISSION LIMITATION (EEL)PUMPS HEAVY LIQUID SERVICE [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			SAMPLING CONNECTION SYSTEMS (ANY SERVICE) [NSPS DDD] = SAMPLING CONNECTION SYSTEMS IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			VALVES IN HEAVY LIQUID SERVICE [NSPS DDD] = VALVES IN HEAVY LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.
			EQUIVALENT EMISSION LIMITATION (EEL)SAMPLING CONNECTION SYSTEMS [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).

Unit ID	Regulation	Index Number	Basis of Determination*
			EQUIVALENT EMISSION LIMITATION (EEL)VALVES HEAVY LIQUID SERVICE [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL).
			COMPLYING WITH § 60.482-3 = YES
			COMPLYING WITH § 60.482-8 = YES
			COMPLYING WITH §60.482-10 = YES
			COMPLYING WITH § 60.482-5 = YES
			COMPLYING WITH § 60.482-8 = YES
P4- VALVEFUG	40 CFR Part 61, Subpart J	61J-1	40 CFR 61 (NESHAP) SUBPART J DESIGN CAPACITY = SITE IS DESIGNED TO PRODUCE OR USE MORE THAN 1,000 MEGAGRAMS OF BENZENE PER YEAR
			ANY COMPONENT IN BENZENE SERVICE [NESHAP J] = THE FACILITY CONTAINS NO COMPONENT(S) IN BENZENE SERVICE
P3-CWT	30 TAC Chapter	115H-1	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.
	115, HRVOC Cooling Towers		Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.
	Cooling Towers		Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.
			Design Capacity = Design capacity to circulate 8000 gpm or greater.
			Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).
			Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.
			Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1).
			Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).
			On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
P3-CWT	30 TAC Chapter	115H-2	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.
	115, HRVOC Cooling Towers	115, HRVOC Cooling Towers Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to	Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.
		5	Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.
			Design Capacity = Design capacity to circulate 8000 gpm or greater.
			Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).
			Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.
			Flow Monitoring/Testing Method = Choosing to use the maximum potential flow rate based on the manufacturer's pump performance data in accordance with §115.764(e)(1).
			Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).
			On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
P3-CWT	40 CFR Part 63, Subpart Q	63Q-1	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.

Unit ID	Regulation	Index Number	Basis of Determination*
P4-CWT	30 TAC Chapter 115, HRVOC Cooling Towers	115H-1	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater. Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1). Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
P4-CWT	30 TAC Chapter 115, HRVOC Cooling Towers	115H-2	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater. Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to use the maximum potential flow rate based on the manufacturer's pump performance data in accordance with §115.764(e)(1). Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
P4-CWT	40 CFR Part 63, Subpart Q	63Q-1	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.
GD-1401	30 TAC Chapter 115, HRVOC Vent Gas	115H-1	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Vent Gas Stream Control = Vent gas stream is controlled by a flare.
GD-1401	30 TAC Chapter 115, Vent Gas Controls	115B-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration = VOC concentration is greater than or equal to 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.

Unit ID	Regulation	Index Number	Basis of Determination*	
GRP- FILTERS1	30 TAC Chapter 111, Nonagricultural Processes	111A-1	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
GRP- FILTERS1	30 TAC Chapter 115, Vent Gas	115B-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
	Controls		Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).	
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
GRP- FILTERS2	30 TAC Chapter 111, Nonagricultural Processes	111A-1	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
GRP- FILTERS2	30 TAC Chapter 115, Vent Gas Controls	r 115B-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).	
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
MD-1401	30 TAC Chapter	, HRVOC Vent	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.	
	115, HRVOC Vent Gas		Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).	
			Vent Gas Stream Control = Vent gas stream is controlled by a flare.	
MD-1401	30 TAC Chapter	115B-1	Alternate Control Requirement = Alternate control is not used.	
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
			Control Device Type = Smokeless flare	
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	

Unit ID	Regulation	Index Number	Basis of Determination*
P3- PELDRYER	30 TAC Chapter 115, HRVOC Vent Gas	115H-1	Alternative Monitoring = Not using alternative monitoring and testing methods. HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule. Vent Gas Stream Control = Vent gas stream is uncontrolled. Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities. Waived Testing = The executive director has not waived testing for identical vents. Testing Requirements = Meeting § 115.725(a).
P3- PELDRYER	30 TAC Chapter 115, Vent Gas Controls	115B-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is less than 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
P4-DRYER1- 2E	30 TAC Chapter 115, HRVOC Vent Gas	115H-1	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate less than or equal to 100 dry standard cubic feet per hour (ft3/hr). Exempt Date = The vent gas stream is not exempt.
P4-DRYER1- 2E	30 TAC Chapter 115, Vent Gas Controls	115B-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is less than 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
P4-DRYER1- 2T	30 TAC Chapter 115, HRVOC Vent Gas	115H-1	Alternative Monitoring = Not using alternative monitoring and testing methods. HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule. Vent Gas Stream Control = Vent gas stream is uncontrolled.

Unit ID	Regulation	Index Number	Basis of Determination*	
			Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.	
			Waived Testing = The executive director has not waived testing for identical vents.	
			Testing Requirements = Meeting § 115.725(a).	
P4-DRYER1- 2T	30 TAC Chapter 115, Vent Gas	115B-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
	Controls		Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).	
			VOC Concentration = VOC concentration is less than 612 ppmv.	
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
PD-1401	30 TAC Chapter	115H-1	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.	
	115, HRVOC Vent Gas		Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).	
	Gas		Vent Gas Stream Control = Vent gas stream is controlled by a flare.	
PD-1401	30 TAC Chapter		Alternate Control Requirement = Alternate control is not used.	
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
			Control Device Type = Smokeless flare	
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
PRO3-POLYP	40 CFR Part 60,	60DDD-1	Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).	
	Subpart DDD		Manufactured Product = Polypropylene or polyethylene.	
			Polyolefin Production = Only one polyolefin is produced or no polyolefin is produced.	
			Continuous Control Device = Flare.	
			Continuous Process = The affected facility process is continuous.	
			Process Emissions = Individual vent gas streams emit continuous emissions.	
			Construction/Modification Date = After January 10, 1989.	
			Uncontrolled Annual Emissions = Uncontrolled annual emissions are less than 1.6 Mg/yr (1.76 tpy).	
			Annual Emissions Entering the Control Device = Annual emissions entering the control device are less than the calculated threshold emissions levels calculated in Table 3.	
			Experimental Process Line = The affected facility is a production process line.	
			Weight Percent TOC = Weight percent of total organic compounds is less than 0.10%.	

Unit ID	Regulation	Index Number	Basis of Determination*
			Table 3 Control Requirements = Calculations from Table 3 do not require controls.
			Table 2 Threshold Emission Rates = The uncontrolled emission rate is less than or equal to the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.
PRO3-POLYP	40 CFR Part 60, Subpart DDD	60DDD-2	Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561). Emergency Vent = Emissions are an emergency vent stream from a new, modified, or reconstructed facility.
			Manufactured Product = Polypropylene or polyethylene.
			Polyolefin Production = Only one polyolefin is produced or no polyolefin is produced.
			Continuous Control Device = Flare.
			Continuous Process = The affected facility process is continuous.
			Existing Control Device = The vent stream is not controlled in an existing control device (as defined in 40 CFR ' 60.561) which has not been reconstructed, replaced, or its operating conditions modified as a result of state or local regulations.
			Process Emissions = Individual vent gas streams emit intermittent emissions.
			Construction/Modification Date = After January 10, 1989.
			Intermittent Control Device = Flare.
			Annual Emissions Entering the Control Device = Annual emissions entering the control device are less than the calculated threshold emissions levels calculated in Table 3.
			Experimental Process Line = The affected facility is a production process line.
			Table 3 Control Requirements = Calculations from Table 3 do not require controls.
			Table 2 Threshold Emission Rates = The uncontrolled emission rate is less than or equal to the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.
PRO4-POLYP	40 CFR Part 60,	60DDD-1	Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).
	Subpart DDD		Manufactured Product = Polypropylene or polyethylene.
			Polyolefin Production = Only one polyolefin is produced or no polyolefin is produced.
			Continuous Control Device = Flare.
			Continuous Process = The affected facility process is continuous.
			Process Emissions = Individual vent gas streams emit continuous emissions.
			Construction/Modification Date = After January 10, 1989.
			Uncontrolled Annual Emissions = Uncontrolled annual emissions are less than 1.6 Mg/yr (1.76 tpy).
			Annual Emissions Entering the Control Device = Annual emissions entering the control device are less than the calculated threshold emissions levels calculated in Table 3.
			Experimental Process Line = The affected facility is a production process line.
			Weight Percent TOC = Weight percent of total organic compounds is less than 0.10%.
			Table 3 Control Requirements = Calculations from Table 3 do not require controls.
			Table 2 Threshold Emission Rates = The uncontrolled emission rate is less than or equal to the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.

Unit ID	Regulation	Index Number	Basis of Determination*
PRO4-POLYP	40 CFR Part 60, Subpart DDD	60DDD-2	Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561). Emergency Vent = Emissions are an emergency vent stream from a new, modified, or reconstructed facility. Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = Only one polyolefin is produced or no polyolefin is produced. Continuous Control Device = Flare. Continuous Process = The affected facility process is continuous. Existing Control Device = The vent stream is not controlled in an existing control device (as defined in 40 CFR ' 60.561) which has not been reconstructed, replaced, or its operating conditions modified as a result of state or local regulations. Process Emissions = Individual vent gas streams emit intermittent emissions. Construction/Modification Date = After January 10, 1989. Intermittent Control Device = Flare. Annual Emissions Entering the Control Device = Annual emissions entering the control device are less than the calculated threshold emissions levels calculated in Table 3. Experimental Process Line = The affected facility is a production process line. Table 3 Control Requirements = Calculations from Table 3 do not require controls. Table 2 Threshold Emission Rates = The uncontrolled emission rate is less than or equal to the uncontrolled threshold emission rates in Table 2 of 40
PRO3-POLYP	40 CFR Part 63, Subpart FFFF	63FFFF-1	Threshold Emission Rates = The uncontrolled emission rate is less than or equal to the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560. >1000 lb/yr = The process has uncontrolled hydrogen halide and halogen HAP emissions from process vents of less than 1,000 lb/yr. Ammonium Sulfate = The MCPU does not include the manufacture of ammonium sulfate as a by-product, or the slurry entering the by-product manufacturing process contains 50 parts per million by weight (pprmw) HAP or less or 10 pprmw benzene or less. Startup 2003 = The affected source startup was before November 10, 2003. Other Operations = The MCPU includes operations other than those listed in § 63.2435(c). Shared Batch Vent = The MCPU does not include a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63. 63.100 CMPU = The MCPU is not a CMPU defined in § 63.100. New Source = The MCPU is not part of a process unit group (PUG). G2/<1000 lb/yr = The process does not include Group 2 batch process vents and/or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. Startup 2002 = The affected source initial startup was before April 4, 2002. PP Alt = The MCPU is complying with the emission limitations and work practice standards contained in Tables 1 through 7. Batch Process Vents = The source does not include batch process vents.
PRO4-POLYP	40 CFR Part 63, Subpart FFFF	63FFFF-1	>1000 lb/yr = The process has uncontrolled hydrogen halide and halogen HAP emissions from process vents of less than 1,000 lb/yr. Ammonium Sulfate = The MCPU does not include the manufacture of ammonium sulfate as a by-product, or the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less. Startup 2003 = The affected source startup was before November 10, 2003. Other Operations = The MCPU includes operations other than those listed in § 63.2435(c).

Unit ID	Regulation	Index Number	Basis of Determination*
			Shared Batch Vent = The MCPU does not include a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63. 63.100 CMPU = The MCPU is not a CMPU defined in § 63.100. New Source = The MCPU is an existing affected source. PUG = The MCPU is not part of a process unit group (PUG). G2/<1000 lb/yr = The process does not include Group 2 batch process vents and/or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. Startup 2002 = The affected source initial startup was before April 4, 2002. PP Alt = The MCPU is complying with the emission limitations and work practice standards contained in Tables 1 through 7. Batch Process Vents = The source does not include batch process vents.

^{* -} The "unit attributes" or operating conditions that determine what requirements apply

NSR vs. Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit (FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOPs are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. In addition, many of the permits are accessible online through the link provided below. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. Permit by Rule (PBR) registrations submitted by permittees are also available online through the link provided below. The following table specifies the PBRs that apply to the site.

The TCEQ has interpreted the emission limits prescribed in 30 TAC §106.4(a) as both emission thresholds and default emission limits. The emission limits in 30 TAC §106.4(a) are all considered applicable to each facility as a threshold matter to ensure that the owner/operator qualifies for the PBR authorization. Those same emission limits are also the default emission limits if the specific PBR does not further limit emissions or there is no lower, certified emission limit claimed by the owner/operator.

This interpretation is consistent with how TCEQ has historically determined compliance with the emission limits prior to the addition of the "as applicable" language. The "as applicable" language was added in 2014 as part of changes to the sentence structure in a rulemaking that made other changes to address greenhouse gases and was not intended as a substantive rule change. This interpretation also provides for effective and practical enforcement of 30 TAC §106.4(a), since for the TCEQ to effectively enforce the emission limits in 30 TAC §106.4(a) as emission thresholds, all emission limits must apply. As provided by 30 TAC §106.4(a)(2) and (3), an owner/operator shall not claim a PBR authorization if the facility is subject to major New Source Review. The practical and legal effect of the language in 30 TAC § 106.4 is that if a facility does not emit a pollutant, then the potential to emit for that particular pollutant is zero, and thus, the facility is not authorized to emit the pollutant pursuant to the PBR.

The status of air permits, applications, and PBR registrations may be found by performing the appropriate search of the databases located at the following website:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

New Source Review Authorization References

Prevention of Significant Deterioration (PSD) Permits				
PSD Permit No.: PSDTX854M2	Issuance Date: 08/08/2018			
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.				
Authorization No.: 19868	Issuance Date: 07/14/2017			
Authorization No.: 35735	Issuance Date: 07/31/2018			
Authorization No.: 95	Issuance Date: 08/08/2018			
Permits By Rule (30 TAC Chapter 106) for the Application Area				
Number: 106.261	Version No./Date: 11/01/2003			
Number: 106.262	Version No./Date: 11/01/2003			
Number: 106.263	Version No./Date: 11/01/2001			
Number: 106.371	Version No./Date: 09/04/2000			
Number: 106.492	Version No./Date: 09/04/2000			

New Source Review Authorization References

Number: 80 Version No./Date: 01/08/1980

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

- 1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
- 2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
- 3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information				
ID No.: GD-1401				
Control Device ID No.: P2-FLARE Control Device Type: Flare				
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: 115B-1			
Pollutant: VOC	Main Standard: § 115.122(a)(1)			
Monitoring Information				
Indicator: Pilot Flame				
Minimum Frequency: Continuous				
Averaging Period: n/a				
Deviation Limit: No pilot flame.				
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras,				

thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.

Unit/Group/Process Information				
ID No.: GD-1401				
Control Device ID No.: P2FLARE	Control Device Type: Flare			
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: 115H-1			
Pollutant: Highly Reactive VOC	Main Standard: § 115.727(f)			
Monitoring Information				
Indicator: Pilot Flame				
Minimum Frequency: Continuous				
Averaging Period: n/a				
Deviation Limit: No pilot flame.				

Unit/Group/Process Information				
ID No.: GRP-FILTERS1				
Control Device ID No.: GRP-FILTERS1 Control Device Type: Fabric Filter				
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: 111A-1			
Pollutant: PM Main Standard: § 111.151(a)				
Monitoring Information				

Indicator: Pressure Drop

Minimum Frequency: four times per hour

Averaging Period: one hour

Deviation Limit: When fabric filter is in operation the minimum pressure drop shall not be below 0.0 inches WC and the maximum pressure drop shall not exceed 5.0 inches WC.

Basis of CAM: It is widely practiced and accepted to control particulate emissions by use of a fabric filter. The option to measure pressure drop is indicative of control device performance since a drop in pressure may indicate holes or tears in the filter or increased pressure may indicate the blinding of bags or the filter has not been adequately cleaned. The deviation limit is based on the most recent performance test, the manufacturer's recommendations, engineering calculations, and/or historical data.

Unit/Group/Process Information				
ID No.: MD-1401				
Control Device ID No.: P3-POLY	Control Device Type: Flare			
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: 115B-1			
Pollutant: VOC	Main Standard: § 115.122(a)(1)			
Monitoring Information				
Indicator: Pilot Flame				
Minimum Frequency: Continuous				
Averaging Period: n/a				
Deviation Limit: No pilot flame.				

Unit/Group/Process Information		
ID No.: MD-1401		
Control Device ID No.: P-3FLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: 115H-1	
Pollutant: Highly Reactive VOC	Main Standard: § 115.727(f)	
Monitoring Information		
Indicator: Pilot Flame		
Minimum Frequency: Continuous		
Averaging Period: n/a		
Deviation Limit: No pilot flame.		

Unit/Group/Process Information		
ID No.: PD-1401		
Control Device ID No.: P4-FLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: 115B-1	
Pollutant: VOC	Main Standard: § 115.122(a)(1)	
Monitoring Information		
Indicator: Pilot Flame		
Minimum Frequency: Continuous		
Averaging Period: n/a		
Deviation Limit: No pilot flame.		

Unit/Group/Process Information		
ID No.: PD-1401		
Control Device ID No.: P4FLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: 115H-1	
Pollutant: Highly Reactive VOC	Main Standard: § 115.727(f)	
Monitoring Information		
Indicator: Pilot Flame		
Minimum Frequency: Continuous		
Averaging Period: n/a		
Deviation Limit: No pilot flame.		

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information		
ID No.: GRP-FILTERS2		
Control Device ID No.: GRP-FILTERS2	Control Device Type: Fabric Filter	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: 111A-1	
Pollutant: PM	Main Standard: § 111.151(a)	
Monitoring Information		
Indicator: Visible Emissions		
Minimum Frequency: Once per week		
Averaging Period: n/a		
Deviation Limit: When fabric filter is in operation there shall be no visible emissions.		
Dagin of monitoring		

Basis of monitoring:

The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.

Obtaining Permit Documents

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online (https://www.tceq.texas.gov/goto/cfr-online). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at https://www.tceq.texas.gov/permitting/air/nav/air status permits.html

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Historical Standard Exemption lists may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Additional information concerning PBRs is available on the TCEQ website:

https://www.tceg.texas.gov/permitting/air/nav/air pbr.html

Compliance Review

- 1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on 04/11/2019. Site rating: <u>11.30 / Satisfactory</u> Company rating: <u>4.02 / Satisfactory</u> (High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
- 2. Has the permit changed on the basis of the compliance history or site/company rating?......No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS? ________Yes 2. Is a compliance plan and schedule included in the permit? _______Yes

Permit reviewer notes:

 (2) Compliance Schedules have been added to the FOP for pellet dryer P3-PELDRYER for pollutants VOC & HRVOC.

Available Unit Attribute Forms

- OP-UA1 Miscellaneous and Generic Unit Attributes
- OP-UA2 Stationary Reciprocating Internal Combustion Engine Attributes
- OP-UA3 Storage Tank/Vessel Attributes
- OP-UA4 Loading/Unloading Operations Attributes
- OP-UA5 Process Heater/Furnace Attributes
- OP-UA6 Boiler/Steam Generator/Steam Generating Unit Attributes
- OP-UA7 Flare Attributes
- **OP-UA8 Coal Preparation Plant Attributes**
- OP-UA9 Nonmetallic Mineral Process Plant Attributes
- OP-UA10 Gas Sweetening/Sulfur Recovery Unit Attributes
- **OP-UA11 Stationary Turbine Attributes**
- OP-UA12 Fugitive Emission Unit Attributes
- OP-UA13 Industrial Process Cooling Tower Attributes

- OP-UA14 Water Separator Attributes
- OP-UA15 Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
- OP-UA16 Solvent Degreasing Machine Attributes
- OP-UA17 Distillation Unit Attributes
- **OP-UA18 Surface Coating Operations Attributes**
- OP-UA19 Wastewater Unit Attributes
- OP-UA20 Asphalt Operations Attributes
- OP-UA21 Grain Elevator Attributes
- OP-UA22 Printing Attributes
- OP-UA24 Wool Fiberglass Insulation Manufacturing Plant Attributes
- OP-UA25 Synthetic Fiber Production Attributes
- OP-UA26 Electroplating and Anodizing Unit Attributes
- OP-UA27 Nitric Acid Manufacturing Attributes
- OP-UA28 Polymer Manufacturing Attributes
- OP-UA29 Glass Manufacturing Unit Attributes
- OP-UA30 Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
- OP-UA31 Lead Smelting Attributes
- OP-UA32 Copper and Zinc Smelting/Brass and Bronze Production Attributes
- OP-UA33 Metallic Mineral Processing Plant Attributes
- OP-UA34 Pharmaceutical Manufacturing
- OP-UA35 Incinerator Attributes
- OP-UA36 Steel Plant Unit Attributes
- OP-UA37 Basic Oxygen Process Furnace Unit Attributes
- OP-UA38 Lead-Acid Battery Manufacturing Plant Attributes
- OP-UA39 Sterilization Source Attributes
- OP-UA40 Ferroalloy Production Facility Attributes
- OP-UA41 Dry Cleaning Facility Attributes
- OP-UA42 Phosphate Fertilizer Manufacturing Attributes
- OP-UA43 Sulfuric Acid Production Attributes
- OP-UA44 Municipal Solid Waste Landfill/Waste Disposal Site Attributes
- OP-UA45 Surface Impoundment Attributes
- OP-UA46 Epoxy Resins and Non-Nylon Polyamides Production Attributes
- OP-UA47 Ship Building and Ship Repair Unit Attributes
- OP-UA48 Air Oxidation Unit Process Attributes
- OP-UA49 Vacuum-Producing System Attributes
- OP-UA50 Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
- OP-UA51 Dryer/Kiln/Oven Attributes
- OP-UA52 Closed Vent Systems and Control Devices
- OP-UA53 Beryllium Processing Attributes
- OP-UA54 Mercury Chlor-Alkali Cell Attributes
- OP-UA55 Transfer System Attributes
- OP-UA56 Vinyl Chloride Process Attributes
- OP-UA57 Cleaning/Depainting Operation Attributes
- OP-UA58 Treatment Process Attributes
- OP-UA59 Coke By-Product Recovery Plant Attributes
- OP-UA60 Chemical Manufacturing Process Unit Attributes
- OP-UA61 Pulp, Paper, or Paperboard Producing Process Attributes
- OP-UA62 Glycol Dehydration Unit Attributes
- OP-UA63 Vegetable Oil Production Attributes